## IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF MISSISSIPPI JACKSON DIVISION

Homebuilder Association of Mississippi, Inc. Homebuilder Association of Jackson, Inc. and R&S Developers, Plaintiffs

v. City of Brandon, Mississippi Defendant CIVIL ACTION NO. 3:07-CV-716WHB-LRA

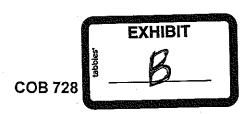
Supplemental Report of Charles D. Cowan, Ph.D.

The following three summaries are presented in response to the reports submitted by the experts for the Plaintiff: Dr. Sager and Dr. Richard. The third expert, Dr. Callies, doesn't address the issue of disparity and his report does not provide any dispositive information.

## Issue 1: Cost of Ownership

- 1.1 The argument made by the Plaintiffs is simple:
  - a. Blacks make less than Whites in Mississippi,
  - b. Requiring houses to have a minimum size will make new houses more expensive, therefore
  - c. There will be a disparate impact on Blacks in terms of their ability to buy new homes.
- 1.2 This argument requires a number of assumptions, none of which are tested or addressed. In particular, it assumes that:
  - a. Blacks in Brandon have paid less for their homes than Whites in all areas of Brandon. 1
  - b. Substitution of goods isn't relevant or doesn't exist. 2

<sup>&</sup>lt;sup>2</sup> See my initial report regarding the lack of support for this assumption.



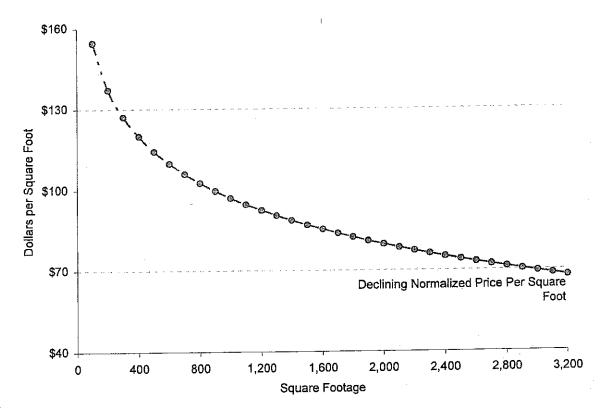
<sup>&</sup>lt;sup>1</sup> See my initial report regarding the lack of support for this assumption.

- c. The only relevant cost is the one time cost of the new home. This ignores dynamic effects in the market that the construction of a new home will have ripple effects in Brandon with respect to the cost of existing homes and there are other costs of home ownership over and above the initial investment.
- 1.3 This ignores dynamic effects in the market that the construction of a new home will have ripple effects in Brandon with respect to the cost of existing homes and there are other costs of home ownership over and above the initial investment.
- 1.4 Defendants argue that the average cost of services (police, fire, other) to small homes is greater than the average amount of taxes collected from each property for properties below the sizes required for new homes. Their argument is that a minimum size of house is needed to guarantee sufficient taxes to provide services at their current level.
- 1.5 If costs for public services increase as the population of Brandon increases AND the size requirement is rescinded, then there are two possible outcomes:
  - a. Taxes are not increased, and services would be diminished. However, those benefiting the most from public services are those people with lower incomes. Higher income people have other resources available that they can substitute. Therefore, those people with lower incomes would be impacted the most, and thus under the Plaintiffs argument, Blacks would be disproportionately impacted.
  - b. Property Taxes are increased so that services remain at the same level. But the cost of homes does not increase linearly in size because of economies of scale in construction.<sup>3</sup>
  - c. An increase in property taxes would have to be sufficient to cover the loss for the smaller homes being built. The increase will be proportionally greater for smaller homes than for larger homes since the tax is on the property value at a constant millage rate (see the report by Dr. Richard, page 8 for the constant rate), not on the size of the home.
  - d. If smaller homes are more likely to be bought by people with lower incomes, and (under the same argument) older smaller homes are more likely to be owned by Blacks, then a tax increase needed to maintain services would disproportionately impact Blacks.

<sup>&</sup>lt;sup>3</sup> A 2,000 square foot house does not cost twice as much as a 1,000 square foot house because of the fixed costs in constructing both and the economies of scale.

1.7 To support this result, from the tax assessor data, the relationship of price per square foot to the basic size of the house is given in Chart 1:

Chart 1: Decline in Sale Price per Square Foot of Home by Square Footage



1.8 The false reliance on only the immediate cost of the new home, rather than the present value of the total investment, leads to a very biased result. If the homebuilders are allowed to build small homes, the ultimate effect on all Blacks currently owning homes in Brandon is likely to be greater than a hypothesized impact on Blacks in the future who haven't yet bought a home. Since this effect would recur each year, year after year, the differential cost imposed on Blacks would overwhelm any benefit to a few new purchasers.

## Issue 2: Inflated Numbers

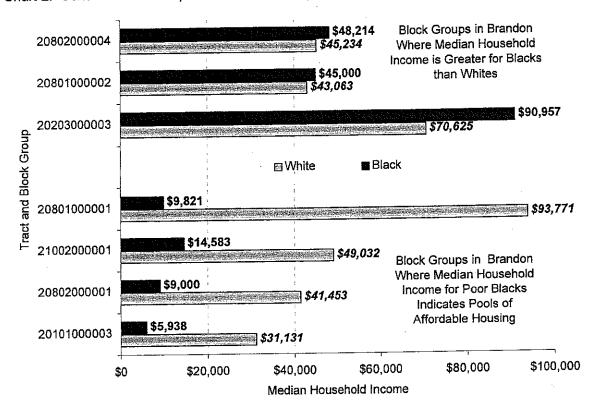
- 2.1 From Dr. Richard's numbers, the price of a home per square foot varies from \$91.32 to \$99.27 using different sources of data, and he settles on \$94.15 as the rate that he obtains from the Metropolitan Home Corporation. This range is large, but not really large enough.
- 2.2 From the tax assessor's data base, using over 7,000 for Brandon rather than 77 recent sales, and adjusting as Dr. Richard does for time effects, the average price per square foot is \$86.29, not \$94.15. This much lower price would greatly change his "Home Affordability Pools", reducing "exclusions" significantly. Given trends in housing in the last year, seeing lower prices for more modest, affordable houses would be a reasonable expectation.

## Issue 3: Who's Affected?

- 3.1 Using the same data as Dr. Richard and Dr. Sager, data from the U.S. Census Bureau on income distributions for household income, the question arises as to who is included in their calculations, and who exactly is affected in the ways they claim.
- 3.2 Plaintiffs claim there is a difference between income levels for Blacks and Whites in Brandon. This is true, but not quite in the way they present. By dealing only with the total distribution of income in Brandon for Blacks and Whites, they average out some interesting disparities regarding who would be affected. This leads to some false conclusions about "affordability".
- 3.3 There are 23 Census Block Groups in Brandon. A Block Group is a collection of contiguous blocks within a Census Tract. Rather than look at Brandon as a whole as Dr. Richard and Dr. Sager do, we can examine exactly the same data with each Block Group. Summing the 23 Block Groups (they don't overlap) would give numbers that are exactly the same as those used by Dr. Richard and Dr. Sager.

3.4 Of the 23 Census Block Groups, there are several that are quite telling – these are displayed in Chart 2:

Chart 2: Census Block Groups and Median Family Income for Each



- 3.5 In several Block Groups, the Median Household Income is greater for Blacks than for Whites. In Chart 2, there are several Block Groups where Median Household Income is greater for Blacks and several more (not shown) where the Median Income is approximately the same for Blacks and Whites. In these large portions of Brandon, there is no apparent disparity since incomes are about the same.
- 3.6 In several other Block Groups, there are huge disparities in income. In the bottom four Block Groups in Chart 2, the Median Household Income for Blacks is less than \$15,000 even though corresponding incomes for Whites are 3.5 to 9+ times greater. Similar results are available for other Block Groups. In Dr. Richard's results, on page 7 he shows that 29.4% of Blacks have Household Incomes less than \$18,668, while only 10.9% of Whites have Household Incomes less than \$18,668. In other words, for both groups, Whites and Blacks, there are significant numbers of families that earn very low incomes.

8/18/08

- 3.7 The point relevant to the analysis for Dr. Richard and for Dr. Sager is the construction of the "affordability pool" differences **includes groups of people who cannot qualify to buy a home.** With such low incomes, it is dubious these families could afford the taxes on the properties even if they paid cash. How can an "affordability pool" be constructed relying primarily on those who cannot afford to purchase a house, regardless of the size of the house?
- 3.8 A more relevant comparison would only include Blacks and Whites who could qualify to purchase a home. While the goal of increasing home ownership for all people regardless of color is a laudable goal, one aggressively pursued by the Department of Housing and Urban Development and the Government Sponsored Entities that promote residential lending, all would agree that there are some families that are not yet ready to purchase a home simply because at any level a house is not affordable.
- 3.9 Including families and individuals who might actually be impacted by the reduction in size is a more relevant consideration. There can't be a disparate impact on individuals who could not purchase a home since they cannot qualify for any type of loan.